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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Christian Marzolin

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12/10/2009

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EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT

PAPER NUMBER

1794

NOTIFICATION DATE

DELIVERY MODE

12/10/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 09/926,367	Applicant(s) MARZOLIN ET AL.	
	Examiner ALICIA CHEVALIER	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-64 is/are pending in the application.
- 4a) Of the above claim(s) 19-26,32-60 and 64 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 61-63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

RESPONSE TO AMENDMENT

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on September 17, 2009 has been entered.

2. Claims 1, 2 and 4-64 are pending in the application, claims 19-26, 32-60 and 64 are withdrawn from consideration. Claim 3 has been cancelled.

3. Amendments to the claims, filed on September 17, 2009, have been entered in the above-identified application.

REJECTIONS

4. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

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pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1, 2, 4-18, 27-31 and 61-63 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In the instant case amended claim 1 contain(s) the limitation “wherein said relief is made of the same material on all of its surfaces.” The examiner is unable to find where in the specification where it does the materials of *all* the surfaces of the relief. Therefore this limitation is considered new matter. The new matter must be deleted.

Claim Rejections - 35 USC § 102

7. Claims 1-4, 6-10, 15, 17, 18, 27-31 and 61-63 are rejected under 35 U.S.C. 102(e) as being anticipated by Huang et al. (U.S. Patent No. 6,352,758).

Regarding Applicant's claim 1, Huang discloses a substrate comprising a relief (*grooved layer, col. 4, lines 24-25 and figures 1-3*), wherein the relief consists of a low surface level and a high surface level (*figures 1-3*). The low surface level has a height not less than 1/10 of the dimensions of a plurality of motifs forming the high surface level, since the references discloses in figure 3 that the height of the motifs is 5 μm and the width of the projection is 4 μm and the spacing between motifs is 4 μm , also see col. 8, lines 49-62. The dimensions are in the region of a micrometer, the height ranges between 0.1 and 10 micrometers (*col. 8, line 52 and figure 3*) and the high surface level represents 1 to 65% of a surface of the substrate (*59% based on figure 3*). The relief is made from the same material on all its surface (*col. 4, lines 35-40*).

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The limitation “wherein said relief provides an angle of advance of a drop of water greater than such angle provided on a flat substrate, which is otherwise the same as said substrate but without said relief, without substantially changing the hysteresis obtained with the flat substrate” is a functional limitation and is deemed to be a latent property of the prior art since the prior art is substantially identical in composition and/or structure. MPEP 2145 (II).

Regarding Applicant’s claim 2, Huang discloses that the substrate is hydrophobic/oleophobic and further comprises an agent of a silicone (*col. 7, line 29*).

Regarding Applicant’s claim 3, Huang discloses that the substrate is hydrophilic/oleophilic (*col. 2, line 65*).

Regarding Applicant’s claims 4 and 61, Huang discloses that the height ranges between 0.1 and 2 micrometers and between 1 and 10 micrometers (*col. 8, line 52*).

Regarding Applicant’s claim 6, Huang discloses that the geometry of the relief displays a periodicity (*figure 1*).

Regarding Applicant’s claim 7, Huang discloses that the low surface level and the high surface level are connect to one another by means of at least one partition approximately perpendicular to a plane of the substrate (*figures 2 and 3*).

Regarding Applicant’s claim 8, Huang discloses that the high surface level displays a continuity in at least one direction of a plane of the substrate (*figures 1-3*).

Regarding Applicant’s claim 9, Huang discloses that the relief comprises a multiplicity of approximately identical parallelepipedal objects, the parallelepipedal objects parallel and uniformly spaced (*col. 9, lines 12-15 and figure 1*).

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Regarding Applicant's claim 10, Huang discloses that the surface level does not display continuity in any direction of a plane of the substrate, since the reference discloses that the grooves can be irregularly shaped (*col. 9, line 1215*).

Regarding Applicant's claim 15, Huang discloses that the relief is based on at least one compound of at least one of the elements selected from the group consisting of Si, W Sb, Ti, Zr, Ta, V, Pb, Mg, Al, Mn, Co, Ni, Sn, Zn, In, a plastic and a plastic containing a filler, the compound optionally hardened by means of application of an energy source, or a thermoplastic, and wherein at least one underlying portion of the substrate is composed of a glass, a plastic or combination thereof (*col. 4, line 49 through col. 5, line 20*).

Regarding Applicant's claim 17, Huang discloses that the substrate has anti-reflecting properties, since the coating significantly reduces light intensity (*col. 9, lines 12-29*).

Regarding Applicant's claim 18, Huang discloses that the substrate has anti-staining properties (*col. 3, line 53*).

Regarding Applicant's claims 27 and 63, Huang's patterned article is deemed to be a glazing since it meets all the limitations of claim 1.

Regarding Applicant's claims 28-31, Huang discloses that the glazing can be added to a building or street furnishing; an air, marine or land transportation vehicle; screen, lamp or electronic display; furnishing or household electrical appliance (*col. 8, line 63 through col. 9, line 1 and col. 3, lines 44-54*).

Regarding Applicant's claim 62, Huang discloses that the furnishing or household electrical appliance is a refrigerator, a self, a shower partition, a refrigerator door, an oven door, a display case or a vitreous ceramic plate (*freezer door, col. 8, line 67*).

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Claim Rejections - 35 USC § 103

8. Claims 5, 11-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang.

Huang is relied upon as described above.

Huang fails to disclose the claimed different relief shapes.

Since Appellant has not shown any criticality to the different relief shapes, it would have been an obvious matter of design choice to change the shape of the relief, since a modification would have involved a mere change in shape of the relief. A change in size or shape is generally recognized as being within the level of ordinary skill in the art, absent unexpected results. MPEP 2144.04 (I) and (IV).

ANSWERS TO APPLICANT'S ARGUMENTS

9. Applicant's arguments in the response filed regarding the under 35 U.S.C. 102(e) rejection over Huang et al. (U.S. Patent No. 6,352,758) of record have been carefully considered but are deemed unpersuasive.

Applicant's arguments regarding the hydrophobic/oleophobic nature of Huang is not open to further prosecution due to the Board of Appeals decision, mailed June 19, 2009, affirming this aspect of the rejection. MPEP 1214.06.

Applicant's arguments regarding silicones are not siloxanes is moot, since silicone is any large group of siloxane polymers based on a structure consisting of alternate silicon and oxygen atoms with various organic radicals attached to the silicon.

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Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alicia Chevalier/
Primary Examiner, Art Unit 1794
12/8/2009